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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,982	10/22/2001	Hiroki Kuribayashi	041514-5151	7217

9629 7590 03/23/2005  
MORGAN LEWIS & BOCKIUS LLP  
1111 PENNSYLVANIA AVENUE NW  
WASHINGTON, DC 20004

EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/982,982	Applicant(s) KURIBAYASHI, HIROKI	
	Examiner Peter Vincent Agustin	Art Unit 2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 November 2004.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.  
     4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 10-13 is/are rejected.  
 7) ☒ Claim(s) 14 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☒ The drawing(s) filed on 14 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. (US 5,815,486) in view of Ota (US 5,559,784).

Kobayashi et al. discloses a recording apparatus (figure 10) for recording/rewriting information by irradiating a beam of light to a recording medium (figure 10, element 1), said recording apparatus including a circuit for generating a recording mark signal (figure 9, element 23) for recording a recording mark of a predetermined length in pre-pit regions while the beam of light is irradiated on the pre-pit regions. However, Kobayashi et al. does not disclose that the recording medium comprises a plurality of recording layers sequentially layered through spacer layers, wherein each of said recording layers is made of a material that changes reflectance upon irradiation of a beam of light and thereby is capable of recording information as a change in reflectance, each of said plurality of recording layers is provided with alternately and adjacently aligned information rewritable regions and pre-pit regions where predetermined information has been written, and average reflectance of said rewritable regions is different from average reflectance of said pre-pit regions.

Ota discloses a recording medium (figure 16) comprising a plurality of recording layers (72a-72c) sequentially layered through spacer layers (74), wherein each of said recording layers

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is made of a material that changes reflectance upon irradiation of a beam of light and thereby is capable of recording information as a change in reflectance (column 5, lines 12-14), each of said plurality of recording layers is provided with alternately and adjacently aligned information rewritable regions (76) and pre-pit regions (75) where predetermined information has been written, and average reflectance of said rewritable regions is different from average reflectance of said pre-pit regions (column 13, lines 39-41). It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have used the multi-layer recording medium of Ota for the apparatus of Kobayashi et al., the motivation being to obtain higher recording density.

3. Claims 11 & 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. & Ota as applied to claim 10 above, and further in view of Maeda et al. (hereafter Maeda) (US 5,808,988).

For a description of Kobayashi et al. & Ota, see the rejection above. However, Kobayashi et al. & Ota do not disclose a circuit for detecting said rewritable regions and said pre-pit regions.

Maeda discloses a circuit for detecting rewritable regions and pre-pit regions (figure 16, element 716). It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have added the circuit of Maeda to the apparatus of Kobayashi et al. & Ota, the motivation being to provide a means to distinguish address information from actual data.

Furthermore, in regard to claim 12, Maeda discloses a reproduction circuit that in the obvious combination would inherently detect a portion that makes the average reflectance of pre-pit regions different from the average reflectance of rewritable regions as in Ota.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. & Ota as applied to claim 10 above, and further in view of Masui (JP 2000339694 A).

For a description of Kobayashi et al. & Ota, see the rejection above. However, Kobayashi et al. & Ota do not disclose a circuit for detecting the recording marks already recorded in said pre-pit regions, and a circuit for, when no recorded recording marks are detected, controlling an optical pick-up to record the recording marks in said pre-pit regions, and when the recorded recording marks are detected, controlling the optical pick-up not to over-write the recording marks in said pre-pit regions.

Masui (see abstract) discloses a circuit for detecting the recording marks already recorded in said pre-pit regions, and a circuit for, when no recorded recording marks are detected, controlling an optical pick-up to record the recording marks in said pre-pit regions, and when the recorded recording marks are detected, controlling the optical pick-up not to over-write the recording marks in said pre-pit regions. It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have added the circuits of Masui to the apparatus of Kobayashi et al. & Ota, the motivation being to prevent overwriting into already recorded areas.

*Allowable Subject Matter*

5. Claim 14 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and

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any intervening claims. See the previous Office Action for a statement of reasons for the indication of allowable subject matter.

*Response to Arguments*

6. Applicant's arguments filed November 10, 2004 have been fully considered but they are not persuasive.

7. The Applicant argues on page 20, paragraphs 3-5 that the subject matter of claim 10 would not be obtained because neither Kobayashi et al. or Ota teach or suggest the features of claim 10, i.e., a circuit for generating a recording mark signal for recording a recording mark of a predetermined length in each of said pre-pit regions, which pre-pit regions have an average reflectance that is different from that of the rewritable regions. The Examiner disagrees. The Examiner acknowledges that Kobayashi et al. do not disclose the claimed property "average reflectance of said rewritable regions is different from average reflectance of said pre-pit regions". In order to cure this deficiency, the Examiner relies on the secondary reference to Ota, which secondary reference teaches of recording layers having rewritable regions and pre-pit regions. There is no reason why the recording marks of the pre-pit regions of Ota could not have been written by the apparatus of Kobayashi et al. Therefore, the combination of Kobayashi et al. & Ota will obtain the claimed features of claim 10.

*Conclusion*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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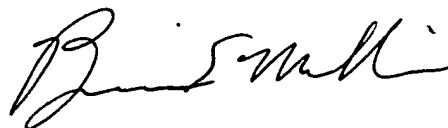
MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is 571-272-7567. The examiner can normally be reached on Monday-Friday 9:30-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Vincent Agustin  
Art Unit 2652



BRIAN E MILLER  
PRIMARY EXAMINER AU2652